

**CITY & COUNTY
ENGINEERING AND TESTING
INC.**

2324 S. Vineyard Ave., Suite B, Ontario, CA 91761; (909)-930-5868

**ON-SITE SEWAGE DISPOSAL
FEASIBILITY INVESTIGATION, 4.83 ACRE SITE
PROPOSED SRI SAI RAM MANDIR, 12594 ROSWELL AVENUE
CITY OF CHINO, COUNTY OF SAN BERNARDINO, CALIFORNIA**

Parcel Map Number: 1016-331-05-0000

**Job #J&P 2018045-SDLRPT
August 19, 2018**

Prepared For:
**SRI SAI RAM MANDIR
C/O ArunaSri Reddy
1207 E. Florida Ave.
Hemet, CA 92543**

Prepared By:.
**CITY & COUNTY ENGINEERING AND TESTING, INC.
2324 S. Vineyard Avenue, Suite B
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Job #J&P2018045 SDI.RPT

**SRI SAI RAM MANDIR
C/O ArunaSri Reddy
1207 E. Florida Ave.
Hemet, CA 92543**

**Subject: ON-SITE SEWAGE DISPOSAL, FEASIBILITY INVESTIGATION 4.83 ACRE
SITE, PROPOSED SRI SAI RAM MANDIR, 12594 ROSWELL AVENUE, CITY OF
CHINO, COUNTY OF SAN BERNARDINO, CALIFORNIA**

LEGAL Parcel Map Number: 1016-331-05-0000

Pursuant to your request, we have conducted an on-site- sewage disposal feasibility investigation based on a seepage pit and septic tank system for the proposed *Sri Sai Ram Mandir* development at the subject site. The accompanying report presents the results of our field investigation, testing, and engineering analysis. The subsurface soil conditions are discussed, and design recommendations are presented.

Our investigation indicates that a private on-site sewage disposal system utilizing a septic tank and seepage pit is feasible on the subject site, provided our recommendations are followed. A design layout "*Plot Plan*" is submitted for the septic tank and seepage pit system (see Plate-2).

During the exploration and testing; the undersigned, drilling cru and our field technician were present on August 12, 2018.

The opportunity to be of service is appreciated. if you have any further questions regarding this matter, please contact this office.

Respectfully submitted,
CITY & COUNTY ENGINEERING AND TESTING INC.



Zenuddin S. Bhatia, R.C.E. #36150

SUMMARY OF ON-SITE SEWAGE DISPOSAL EXPLORATION AND PERCOLATION TESTING

Four(4) exploratory borings to a maximum depth of 40 feet were drilled using a truck mounted hollow stem auger CME-45. The test borings were logged and sampled at every five feet intervals by the field engineer. After completion of the boreholes, the bottom 10 feet of the percolation test holes (from 40 to 30 feet) were backfilled using on-site sandy materials. Thereafter, a three (3) inch perforated pipe, wrapped with filter fabric was installed in the test hole. and side gaps were filled with on-site sandy materials. The test holes were filled with water and pre-soaked as per the requirements of the County of San Bernardino. The water was observed to be percolating relatively slow therefore. 30-minute readings were taken. Seven (7) readings of 30 minutes each were obtained in each test hole. The final rate of percolation was observed to be **2.40 gal sq. ft. per day** from 4 to 30 feet depths at the subject site. The correction factor of 0.85 was used to compensate the use of portion of on-site soil to backfill the gap between the pipe and the hole. Accordingly, the designed percolation rate will be $2.4 \times 0.85 = 2.0$ gal/sq. ft./day.

SUB SOILS CONDITION

The site is covered with grass and weeds sparsely to a depth of 3 inches. Old windblown fill consists of dark gray, fine silty sand (SM), dry and slightly moist; loose up to 2 feet depth. The subsoil below 2-feet up to a depth of 6 feet found to be dark gray, fine silty sand, poorly graded, slightly moist and medium dense. The underlying soils found to be olive gray, fine silty sand and sandy silt (ML), slightly moist to moist and medium dense to stiff up to a maximum depth of our borings to 40 feet below existing ground level.

A more detailed description of the earth materials encountered is presented on the logs of exploratory borings in Appendix-A. The soil strata as described on the boring logs represent the soil conditions at the actual boring locations, other variations may occur between the borings.

Based on the exploration and testing, the sub soils at the subject site within the marked percolation testing area were found to be fine grained silty sand and sandy silt (SM and ML), relatively moderate draining and permeable. These materials are suitable for satisfactory functioning of on-site sewage disposal system utilizing a septic tank and seepage pit for the subject development without causing any unhygienic health condition in or around the site.

2. DESCRIPTION OF SITE AND PROPOSED DEVELOPMENT

**2.A) Prepared for: SRI SAI RAM MANDIR
C/O ArunaSri Reddy
1207 E. Florida Ave.
Hemet, CA 92543**

2.B) Location of Site:

- (a) The project site is located at 12594 Roswell Avenue, Chino Area, within the County of San Bernardino, California.

(b) **Parcel Map Number: 1016-331-05-0000**

2.C) Proposed Development

- a) **Type of Project:** The proposed on-site sewage disposal system consisting of two (2), fifteen hundred (1700) gal. Septic tanks with four seepage pits of five feet diameter and 29 feet total depth including upper 4 feet inlet.
- b) **Size and Proposed Project:** The site is irregular shaped and covers approximately 4.90 acres. Several structures located around the site have been developed with a single-family home utilizing on-site sewage disposal method of septic tank and seepage pits and are working satisfactorily for the last 5-10 years. The proposed site will be developed for a **Sri Sai Ram Mandir Center**, a community religious place with maximum of **80 fixture units; ie 3375 gal. capacity septic tank**.
- c) **Type of On-Site Sewage Disposal System:** On-site sewage disposal system based on septic tank and seepage pit is proposed for the proposed Community Religious Center at the subject site. The project will have 3375 gal. septic tank and four (4) seepage pits of five (5) feet diameter and total 31 feet depth including 4-feet inlet.
- d) See Plot Plan for location of exploratory test holes, percolation holes and septic tank/seepage pit system.

2.D) Description of Site and Surroundings

Topography: The site is fairly level sloping to the south and southeast by less than 2%. Abandoned water well is located in the southeast of the site, and it is more than 200 feet away from the proposed seepage pit locations. No drainage course is located within 200 feet of the site.

- a) **Water Courses and Drainage:** The natural drainage is by sheet flow to the southeast.
- b) **Vegetation:** The site is vacant, was partly developed with a single-family home, which was later on used as Armstrong Nursery for several years, and demolished and removed from the site. At present it is covered with dense weeds, seasonal grass and few scattered trees.
- c) **Existing Wells:** There is abandoned water well in the southeast portion and it is more than 200 feet of away from the proposed seepage pits.
- d) **Existing Structures:** No structure existed on the site during the exploration. The site was vacant and reported as undeveloped except a dwelling and was used for nursery

business. The seepage pits and septic tank must be at least 10-feet away from the adjacent property lines.

- e) **Rock Outcrops:** There are no rock outcrops located on the property.
- f) **Ground Water:** No ground water was encountered in our exploratory borings to a maximum depth of 40 feet during the investigation. Based on the data obtained from the local water district, the depth of free ground water in the vicinity of the site is more than 50 feet.
- g) **Other Features:** There are no other features that may affect the performance of the sewage disposal system.
- i) **Anticipated Grading:** A maximum four (4) feet of cut/fill grading is anticipated in the proposed septic tank and seepage pits area.

2.E) Exploration Equipment

Four exploratory borings including two (2) percolation test holes were drilled using a truck mounted CME-45 hollow stem auger-8-inch diameter. A water hose was used for percolation testing. Also, used for conducting the percolation testing were a tape measure with 1/16-inch gradation, a mirror and a flashlight.

2.F) METHODOLOGY AND PROCEDURES

- a) **Location of Boring** The exploratory borings and percolation test holes were located nearby the proposed septic tank and seepage pit system site to obtain a representative sampling of the soil conditions. See the plot plan, Plate-2, for location of exploratory borings and percolation holes.
- b) **Test Procedures:** The percolation test holes were drilled to a depth of 40 feet below the ground. The sub soils up to a depth of 8 feet was fine poorly graded silty sand (SM), thereafter it was becoming fine silty sand and sandy silt (SM-ML) to a maximum drilled depth of 40 feet. The perforated pipe was wrapped with filter fabric to minimize clogging of pipe holes. The test holes were soaked prior to performing percolation testing. The percolation tests were performed in accordance with the guidelines provided by the *County of San Bernardino, Department of Environmental Health Services, Booklet "On-Site Waste Water Disposal System"*.

2.G) RESULTS

- a) The water was observed to be percolating relatively slow in the test holes; therefore 30-minute readings were obtained. Seven (7) readings of 30 minutes each were obtained. The final rate of percolation was observed to be ***2.4.0-gal sq. ft. per day from 4 to 30 feet depth at the subject site. The designed percolation rate considering 0.85 corrections factor will be 2.0 gal/sq. ft./day.***

- b) Ground water was not encountered in any of our boring during the exploration or prior to backfilling to a maximum depth of 40 feet. The depth of groundwater in the vicinity of the site is more than 50 feet from the ground surface.

Test Results: See the attached percolation test data and results in Appendix D.

2.H). DISCUSSION OF RESULTS

- a) **Uniformity:** The percolation test results were relatively uniform and are indicative of the type of earth materials encountered.
- b) **Variability or Error:** Caving in the percolation test hole did occur and was minimal. The percolation testing could be carried out per the County guidelines. The percolation rates obtained, and subsoil strata encountered including soil gradation testing of the materials encountered during the exploration did provide sufficient data related to soil permeability.

2.I). DESIGN RECOMMENDATIONS

The site is proposed for a Sri Sai Ram Mandir Center with total 80 plumbing fixtures including toilets, urinals, sinks, shower and floor drains.

Based on the exploration and percolation data summarized in this report and per the County guidelines a design absorption rate of 2.0 gal. Sq. ft./day shall be considered.

Absorption area shall be calculated based on 3375-gal effluent per day. Accordingly, four (4) seepage pits of 5 feet in diameter and total depth of 31 feet from the top with 4 feet inlet are recommended.

2.J). PLOT PLAN

See Plate-2 for the proposed site design and location of exploratory borings and percolation test holes. A grading plan with building location should be submitted to us for review and final approval of the proposed on-site sewage disposal system.

2.K) CONCLUSIONS AND RECOMMENDATIONS

(On-site Sewage Disposal System)

Our evaluation of the soil conditions indicates that a private on-site sewage disposal system utilizing a septic tank and seepage pit appears to be feasible, provided our recommendations are followed for the design and construction of the system. See the summary sheet for system design requirements. See the plot plan for locations of exploratory and percolation hole.

Based on the data presented in this report, and testing information accumulated, it is our judgment that the ground water table will not encroach within current allowable limits set forth by County and State requirements and is not expected to be less than 50 feet beneath the existing ground surface in the areas of the on-site sewage disposal system.

It is our opinion that the proposed on-site sewage disposal system utilizing a septic tank and seepage pit for the subject development will work satisfactorily without causing any unhygienic health condition in or around the site.

Based on the data and recommendations presented in this report, it is our judgment that there is sufficient area on the site to support a private on-site sewage disposal system based on seepage pit and a septic tank.

The seepage pit excavation should be inspected by ***City & County Soil Engineering and Testing and the County of San Bernardino***. In the event, if this firm does not perform the inspection, City & County Soil engineering and testing will not be responsible for the subject work.

Should excessive grading be performed on the above site in the future sewage disposal system areas, we should be contacted immediately before commencement of grading to make appropriate recommendations for the installation of the sewage disposal system.

Seepage pit and septic tank materials and installation should conform to the standards and specifications of the State and County.

All recommendations are subject to review and revisions of the County of San Bernardino, Environmental Health Division. No final planning or construction shall commence prior to approval of the sewage disposal system by the County.

Respectfully Submitted,

CITY & COUNTY ENGINEERING AND TESTING INC.



Zen S. Bhatia, R.C.E. #36150,

Dist: (4) Copies to addressee

Attachment:	Index Map	Plate 1
	Boring Location map	Plate-5
	Percolation Test Data	Sheet-

City & County Engineering and Testing, Inc.

Page 6

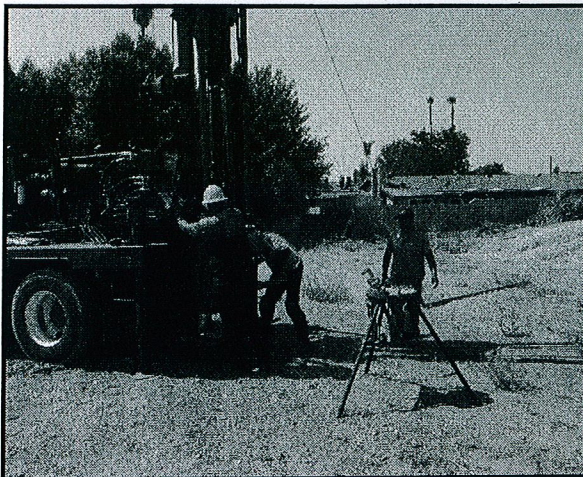
SITE PHOTOGRAPHS



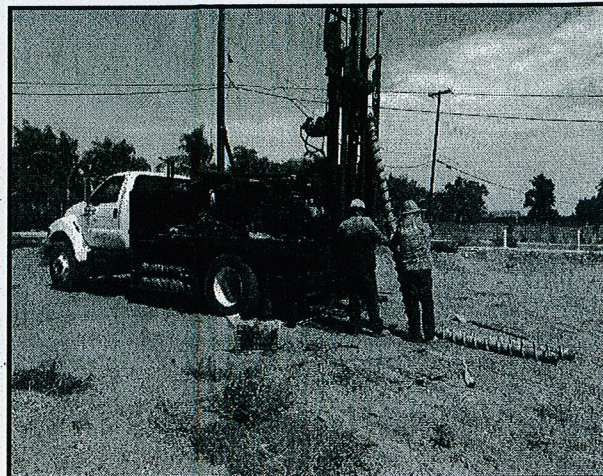
VIEW- EAST TO WEST



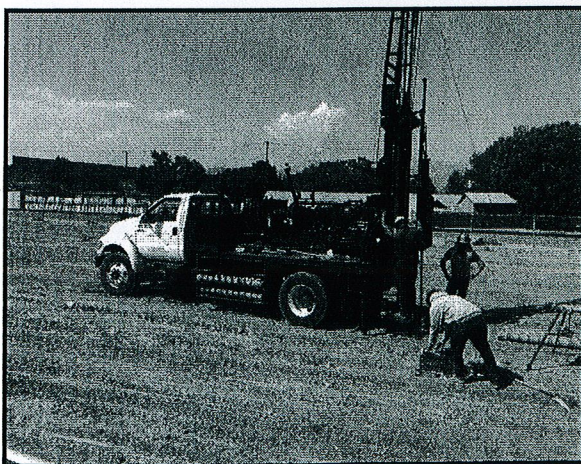
VIEW- DOUBLE RING INFILT. TEST



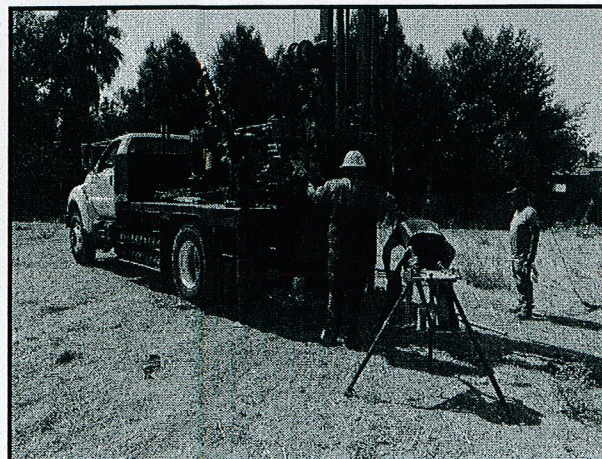
VIEW- NW TO SE



VIEW- SE TO NW



VIEW- SOUTH TO NORTH



VIEW- WEST TO EAST



Notes

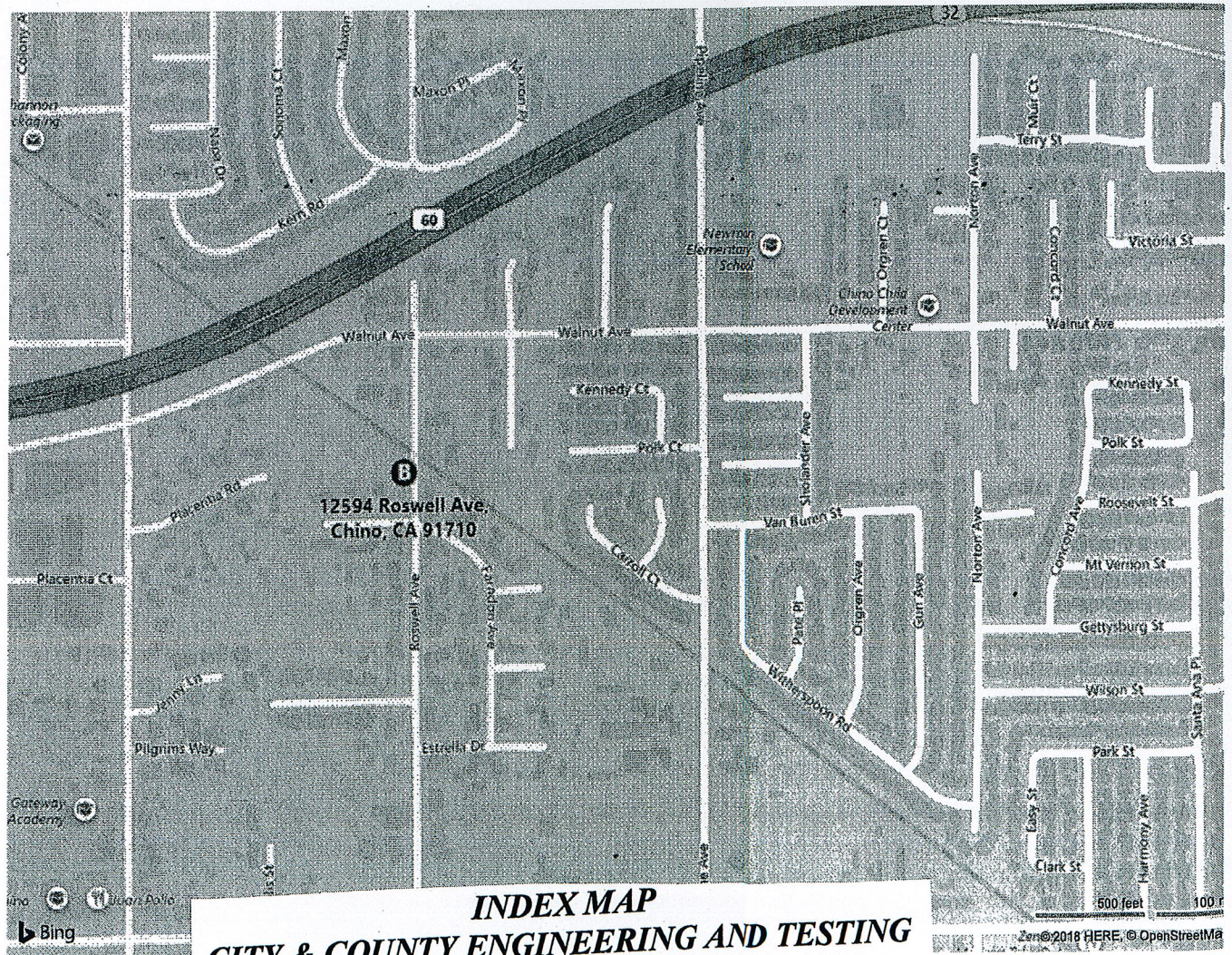
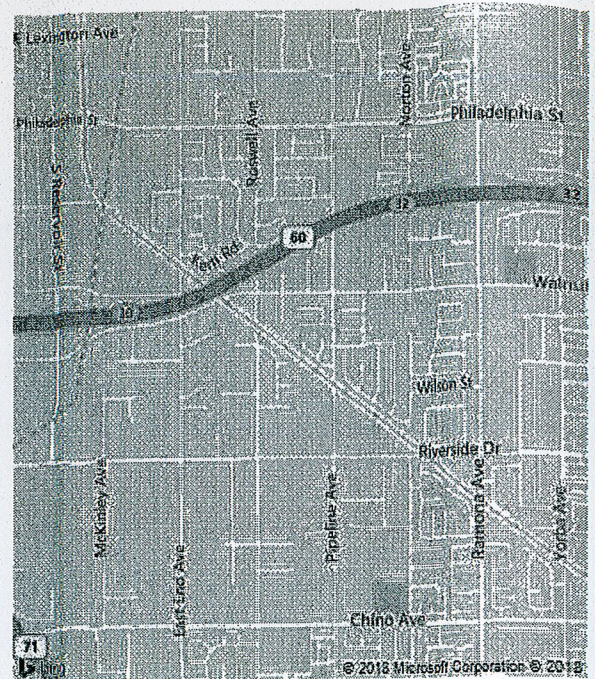
SRI SAI RAM TEMPLE

JOB #J&P2018037P1

August 7, 2018

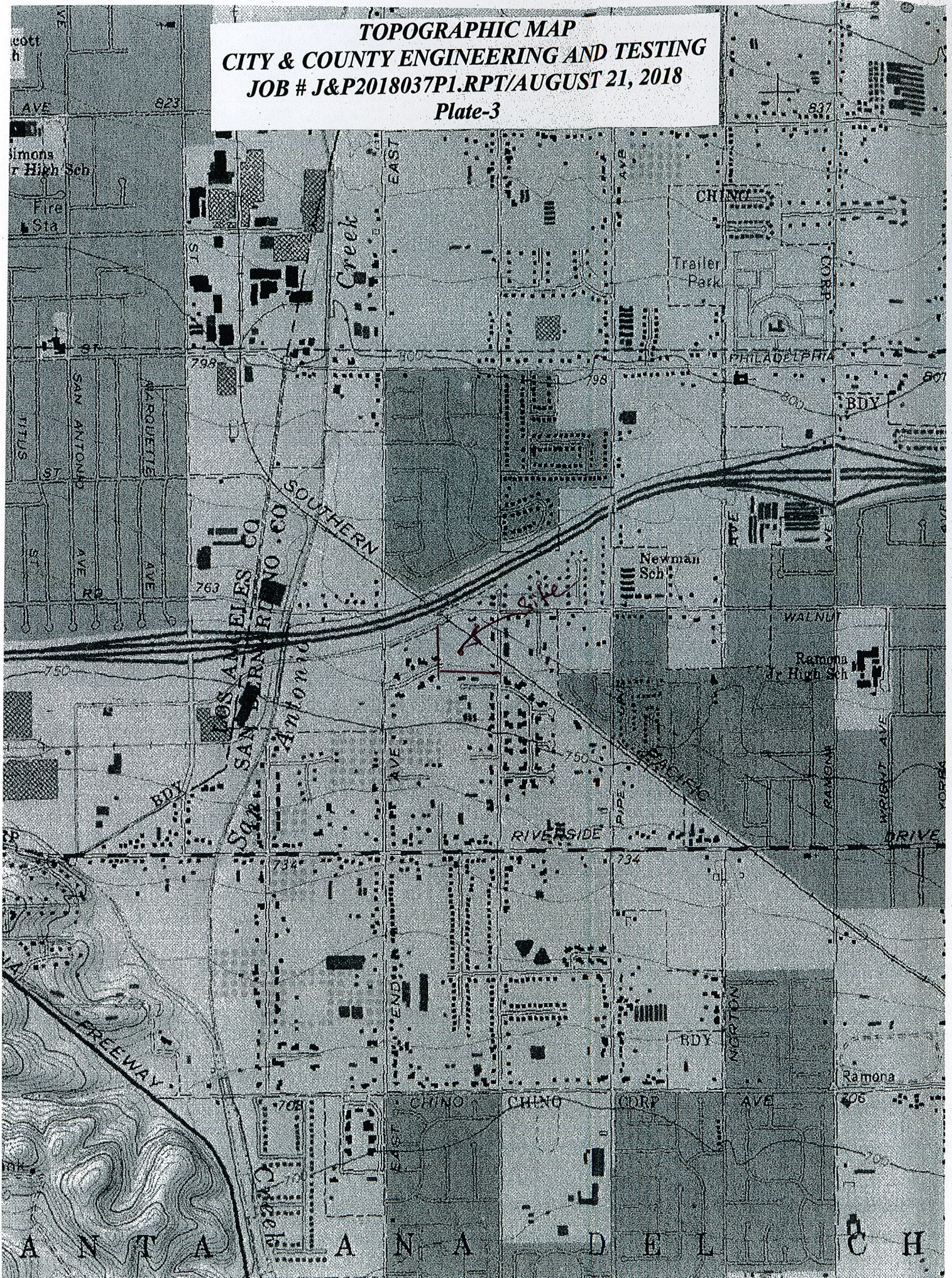
INDEX MAP

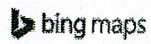
Plate 2



INDEX MAP
CITY & COUNTY ENGINEERING AND TESTING
JOB # J&P2018037P1.RPT/August 21, 2018
Plate-2

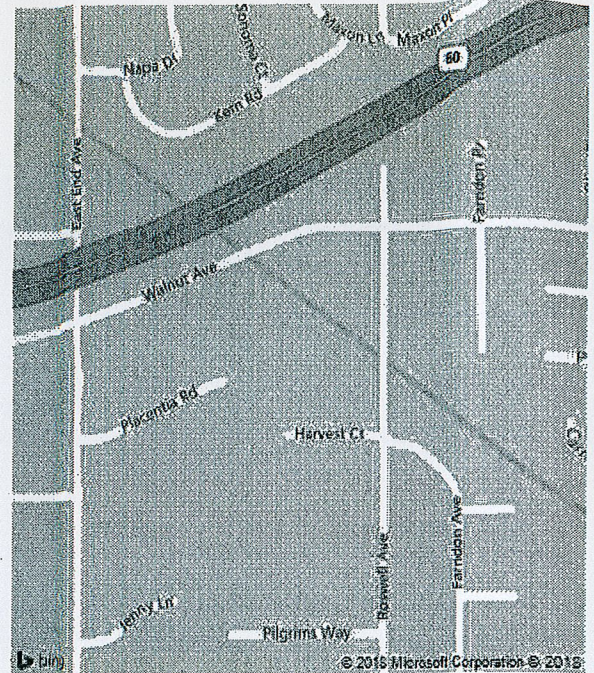
TOPOGRAPHIC MAP
CITY & COUNTY ENGINEERING AND TESTING
JOB # J&P2018037P1.RPT/AUGUST 21, 2018
Plate-3





Notes

SRI SAI RAM TEMPLE
JOB #J&P2018037P1
August 7, 2018
AERIAL MAP
Plate 3



AERIAL PHOTO MAP
CITY & COUNTY ENGINEERING AND TESTING
JOB # J&P2018037P1.RPT/AUGUST 21, 2018
Plate-4

TOPOGRAPHIC SURVEY
12594 ROSWELL AVE
CHINO, CA 91710

12594 ROSWELL AVE
CHINO, CA 91710

SCALE: 1"=30'

BENCH MARK

THE REMARKS IN LOCATED AT 6.3 MI. E ALONG ELMORE AVE. FROM S
Hwy. 80 TO WALNUT ST. IN WELL IN SECTION, 2 FT. S OF CLINE AT N
END S SECTION, 44 FT. S OF INTERSECTION.

BASIS OF BEARINGS

THE SURVEY WAS BASED ON THE COCKLINE BEARINGS OF
ROBELL AND BEARS N 099° 05' E AS SHOWN ON THE TRACT
NO. 714, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA

VICINITY MAP

LEGAL DESCRIPTION

THAT PORTION OF LOT 36, SECTION 4, TOWNSHIP 2 NORTH, RANGE 2 WEST, SAN JUAN MOUNTAIN MEADOWS, ACCORDING TO MAP OF SUBDIVISION OF PART OF ALVARO SANTA ANA DEL CERRO, IN THE COUNTY OF SAN JUAN, CALIFORNIA, BEING THE EAST 1/2 OF SAID LOT 36, BEING MORE IN DETAIL IN BOOK 1, PAGE 13 OF MAPS, IN THE OFFICE OF THE COUNTY CLERK OF SAID COUNTY, LIES SOUTHWESTERLY OF THE CONTIGUOUS TO THE WEST OF RAIL OF THE PUEBLO AND CLIMATE RAILROAD.

EXCEPTED THEREFROM THAT PORTION DUE TO THE STATE OF CALIFORNIA
SHOWN AS FOLLOWS:

[illegible]

ALSO EXCEPTING THEREFROM AN UNDIVIDED ONE-HALF INTEREST IN AND TO THE WELL AND PLANT/PLANT LOCATED ON THE WEST 8 FEET OF THE EAST 170.68 FEET OF THE SOUTH 28.8 FEET OF THE NORTH 488.83 FEET W/2CROP.

Scale 1: 76

ABBREVIATIONS

LEGEND

[illegible]

PROPERTY LINE(E)
STREET CENTERLINE(E)
GUMS AND GUTTER
EX BUILDING/ STRUCTURE
EXISTING CONTOUR LINE
AS PAVING
BLOCK WALL
OVERLAND
TREE (TRUNK OVER 4")
BUSHES
RAIL ROAD
CLF
M
FH
PP
TEL WH
WOLLAND
SWT/ NO
CONG WALL

CONCLUSIONS

REFERENCES

1

References

IG, INC.

G ENGINE

10



**DRAW
DESIGN
ONE OF**

8
LATE

1

APPENDIX A
PERCOLATION TEST DATA/GRAPH

CITY & COUNTY SOIL ENGINEERING AND TESTING

PERCOLATION TEST RESULTS AND DESIGN
FOR SEEPAGE PIT

Job #: J&P2018045-SDS.PRC

Site: AP #1016-331-05-0000

12594 Roswell Ave., Chino, California

Project Description: Sri Sai Ram Mandir Center with total 80 plumbing fixture units

<u>Test #</u>	<u>Depth of Test</u>	<u>Soil Classification</u>	<u>Percolation Rate (Gal/Sq. Ft./Day)</u>
P-1 (B-1)	0-40'	Olive gray, fine to medium silty sand (SM)	2.50 gal./ sq. ft./day
P-2 (B-7)	0-40'	Olive gray, fine to medium silty sand (SM)	2.32 gal./ sq. ft./day

After considering correction factor of 0.85 for backfilling the gap between the pipe and the hole partly with on-site soils, the approved Designed Percolation rate is 2.0 gl/sq. ft./day

<u>Design Percolation Rate (Gal/Sq. Ft./Day)</u>	<u>Effective Sidewall Area</u> (sq. ft. per 100 gal. Effluent)
2.0	50.0

<u>Nos. of Fixture Units</u>	<u>Septic Tank Size Required</u>	<u>Required Side Wall Area</u>
80-plumbing fixture units	$3000 \times 0.75 + 1125 = 3375$ Gallons	3375 sq. ft.

Proposed Seepage Pit Size Proposed Seepage Pit Area**Four Seepage Pit of Five (5) feet Diameter****31-feet total depth with 4-feet inlet****Effective Depth of 27-feet** **$2 \times (4) \times 27' \times 5' \times 3.14 = 3391$ sq. ft.****See Plot Plan for Location of Seepage Pits and Septic Tanks****Note: 100% expansion is provided**

PERCOLATION TEST DATA - SEEPAGE PITS

Test No. B-1CP4
Client: Sri Sri Ram Mandir

Job No. JEP2018045SDI

Site: 12594 Roswell Ave
Chino, CA

Date of Boring: 8/12/18

Boring Diameter: 8" diam

Test Performed By: JM

Presaturation: Date: 8/12/18

Time: 8am

Remarks: _____

Percolation Testing: Date: 8/12/18 - 1 pm

Remarks: _____

Soil Type: _____

READING No.	TIME									
	Ti Tf	ΔT	Te	Di	Df	F	Hi	Hf	L	Q
1	1:01 pm 1:30	30	30	52"	110"	4.8'	30	29.0	22.74	2.54
2	1:37 2:07	30	60	52"	105"	4.4'	29	28.5	21.97	2.41
3	2:14 2:44	30	90	49"	99"	4.2'	28.5	27.5	21.81	2.32
4	2:50 3:10	30	120	46"	99"	4.4'	27.5	26.0	20.58	2.57
5	3:22 3:52	30	150	49"	97	4.0'	26.0	25.5	19.66	2.45
6	4:00 4:30	30	180	49"	97	4.0'	25.5	24.0	18.66	2.58
7	4:35 5:05	30	210	48"	95	3.9'	24.0	23.5	17.80	2.64
8										
9										
10										
11										
12										
13										

Average Rate 2.50

Correction Factor 0.85 = 2.12

gal/safe/day

$$L = (H_i - D_i) + (H_f - D_f) / 2$$

Based on safety factor of 5

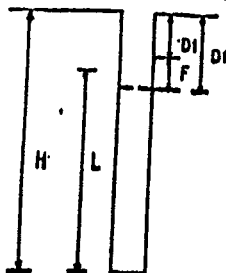
$$Q = \frac{9D \frac{F}{T}}{L}$$

Sample Calculations Reading No. _____

() _____

Q = _____ =

- Ti- Initial time after filling is completed
- Tf- Final time at end of fall
- ΔT- Time interval, minutes
- Te- Total elapsed time, minutes
- Di- Initial depth to water surface at Ti, feet (from ground surface)
- Df- Final depth to water surface at Tf, feet
- F- Drop in water level, feet
- Hi- Total depth of hole at Ti, feet (From ground surface)
- Hf- Total depth of hole at Tf, feet (From ground surface)
- L- Average wetted depth
- Q- Rate in gal/sq. ft./day



City & County Soil Engineering And Testing

PERCOLATION TEST DATA - SEEPAGE PITS

Test No. P-2CB-7
Client: Sri Sai Ram Mandir

Job No. J&P2018045 SDI

Site: 12594 Roswell Ave
Chino, CA

Date of Boring: 8/12/18 - 8am

Boring Diameter: 8" diam

Test Performed By: JM

Presaturation: Date: 8/12/18

Time: 8am

Remarks: _____

Percolation Testing: Date: 8/12/18 @ 11:03 am

Remarks: _____

Soil Type: _____

READING No.	TIME									
	Ti Tf	ΔT	Te	Di	Df	F	Hi	Hf	L	Q
1	11:03 11:33	30	30	50"	109"	4.9'	30	30	23.37	2.52
2	11:41 12:11	30	60	33"	87"	4.5'	30	29	24.57	2.21
3	12:17 12:47	30	90	56"	108"	4.3'	29	28.5	21.8	2.37
4	12:53 1:23	30	120	55"	105"	4.2'	28.5	28	21.5	2.34
5	1:31 2:02	30	150	56"	102"	3.8'	28	27.5	21.17	2.16
6	2:10 2:40	30	180	50"	97"	4.0'	27.5	27.0	21.12	2.28
7	2:50 3:20	30	210	49"	95"	4.0'	27.0	26.5	20.03	2.40
8										
9										
10										
11										
12										
13										

Average Rate 2.32

Correction factor 0.85 = 1.97

gal/(sq. ft./day)

$$L = (H_i - D_i) + (H_f - D_f) / 2$$

Based on safety factor of 5

$$Q = \frac{9D \frac{F}{T}}{L}$$

Sample Calculations Reading No. _____

() _____

Q = _____ =

Ti- Initial time after filling is completed
Tf- Final time at end of fall
ΔT- Time interval, minutes
Te- Total elapsed time, minutes
Di- Initial depth to water surface at Ti, feet
(from ground surface)

Df- Final depth to water surface at Tf, feet

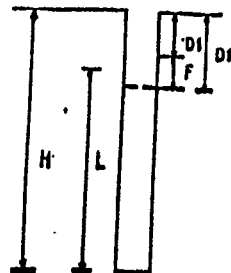
F- Drop in water level, feet

Hi- Total depth of hole at Ti, feet (From ground surface)

Hf- Total depth of hole at Tf, feet (From ground surface)

L- Average wetted depth

Q- Rate in gal/sq. ft./day



City & County Soil Engineering
And Testing

BORING LOG NO. B-1 (P-1)

Job # J&P2018037P1		08/12/18		Client: SRI SAI RAM MANDIR		
Hole Diameter: 8"		Elev. G.L.		Location: 12594 ROSWELL AVE., CHINO, CA		
Sampling Method		Drive Wt. 140#		CME-45		Logged By: ZB
Drop: 30"				Drilling Co: GEOMAT DRILLING, RIVERSIDE, CA		
Dry Density (pcf)	Depth (ft)	# of Blows (ft)	Moist. (%)	Sample Type	Soil Class	Earth Materials Description Top Soil: Dense grass-vegetation-12"
					SM	Dark gray, fine silty sand, grass, vegetation, roots s. moist
						very loose
99.1		38	12.0	■ ●	SM	Brown, fine silty sand, poorly graded, v. moist, med. loose
						dense, 27% passing #200 sieve
	5					
116.4		37	1.7	■ ●	SM	Olive gray, fine silty sand, poorly graded, s. moist, med.
						dense,
	10					
		8		◆	ML	Olive gray, fine sandy clayey silt, moist, stiff
	15					
		22		◆	SM	Olive gray, fine silty sand, poorly graded, moist, medium
						dense
	20					
		19		◆	ML	Olive gray, fine sandy clayey silt, moist, very tiff
	25					
		15	8.0	◆	SM	Olive gray, fine silty sand, poorly graded, moist, medium
						dense , 38% passing #200 sieve
	30					



Undisturbed Ring Sample
Bulk Sample
Standard Penetration Test

City & County

**Soil Engineering
And Testing**

BORING LOG NO. B-2

Job # J&P2018037P1

08/12/18

Client: SRI SAI RAM MANDIR

Hole Diameter: 8"

Elev. G.L.

Location: 12594 ROSWELL AVE., CHINO, CA

Sampling Method

Drive Wt. 140#

CME-45

Logged By: ZB

Drop: 30"

Drilling Co: GEOMAT DRILLING, RIVERSIDE, CA

Dry
Density
(pcf)Depth
(ft)# of
Blows
(ft)Moist.
(%)Sample
TypeSoil
ClassEarth Materials Description
Top Soil: Dense grass-vegetation-12"

					SM	Dark gray, fine silty sand, grass, vegetation, roots s. moist very loose
		46		■ ●	SM	Light brown, fine to coarse silty sand, few gravel, s. moist, medium dense, 27% passing #200 sieve
	5					
104.0		17	7.7	■ ●	SM	Light brown, fine silty sand, moist, med. dense 27% passing #200 sieve
	10					
		9		◆	ML	Olive gray, fine sandy clayey silt, moist, stiff
	15					
		13		◆	ML	Olive gray, fine sandy clayey silt, moist, stiff
	20					
		20		◆	ML	Olive gray, fine sandy clayey silt, moist, very stiff
	25					
						End of Boring @ 25 feet Depth
						No Groundwater Encountered
						Boring Backfilled

Undisturbed Ring Sample
Bulk Sample
Standard Penetration Test**City & County****Soil Engineering
And Testing**

BORING LOG NO. B-3

Job # J&P2018037P1		08/12/18		Client: SRI SAI RAM MANDIR		
Hole Diameter: 8"		Elev. G.L.		Location:12594 ROSWELL AVE., CHINO, CA		
Sampling Method		Drive Wt. 140#		CME-45		Logged By: ZB
Drop: 30"				Drilling Co: GEOMAT DRILLING, RIVERSIDE, CA		
Dry Density (pcf)	Depth (ft)	# of Blows (ft)	Moist. (%)	Sample Type	Soil Class	Earth Materials Description Top Soil: Dense grass-vegetation-12"
					SM	Dark gray, fine silty sand, grass, vegetation, roots s. moist
						very loose
	5	31		■ ●	SM	Brown, fine silty sand, poorly graded, v. moist, med.
						dense, 27% passing #200 sieve
	10	14		■ ●	ML	Olive gray, fine sandy clayey silt, moist, stiff
	15	9		◆	ML	Olive gray, fine sandy clayey silt, moist, stiff
	20	13		◆	ML	Olive gray, fine sandy clayey silt, moist, stiff
						dense
	25	14		◆	ML	Olive gray, fine sandy clayey silt, moist, stiff
	30	17		◆	ML	Olive gray, fine sandy clayey silt, moist, very stiff



Undisturbed Ring Sample
Bulk Sample
Standard Penetration Test

City & County

**Soil Engineering
And Testing**

BORING LOG NO. B-3 (Continuous from 30')

Job # J&P2018037P1

08/12/18

Client: SRI SAI RAM MANDIR

Hole Diameter: 8"

Elev. G.L.

Location: 12594 ROSWELL AVE., CHINO, CA

Sampling Method

Drive Wt. 140#

CME-45

Logged By: ZB

Drop: 30"

Drilling Co: GEOMAT DRILLING, RIVERSIDE, CA

Dry
Density
(pcf)Depth
(ft)# of
Blows
(ft)Moist.
(%)Sample
TypeSoil
ClassEarth Materials Description
Top Soil: Dense grass-vegetation-12"

30

17



ML

Olive gray, fine sandy clayey silt, moist, very stiff

35

13



ML

Olive gray, fine sandy clayey silt, moist, stiff

dense, 27% passing #200 sieve

40

11



ML

Olive gray, fine sandy clayey silt, moist, stiff

*End of Boring @ 40 feet Depth**No Groundwater Encountered**Boring Backfilled*Undisturbed Ring Sample
Bulk Sample
Standard Penetration Test**City & County****Soil Engineering
And Testing**

BORING LOG NO. B-4

Job # J&P2018037P1		08/12/18		Client: SRI SAI RAM MANDIR		
Hole Diameter: 8"		Elev. G.L.		Location:12594 ROSWELL AVE., CHINO, CA		
Sampling Method		Drive Wt. 140#		CME-45		Logged By: ZB
Drop: 30"				Drilling Co: GEOMAT DRILLING, RIVERSIDE, CA		
Dry Density (pcf)	Depth (ft)	# of Blows (ft)	Moist. (%)	Sample Type	Soil Class	Earth Materials Description Top Soil: Dense grass-vegetation-12"
					SM	Dark gray, fine silty sand, grass, vegetation, roots s. moist
						very loose
		28		■ ●	SM	Lt. brown, fine silty sand, poorly graded, s. moist, med.
	5					dense,
98.4		33	4.4	■ ●	SM	Olive gray, fine silty sand, poorly graded, s. moist, med.
	10					<i>dense, 23% passing #200 sieve</i>
		13	17.8	◆	ML	Olive gray, fine sandy clayey silt, moist, stiff
	15					<i>57% passing #200 sieve</i>
		21		◆	SM	Olive gray, fine silty sand, poorly graded, moist, medium
	20					dense
		24	7.3	◆	SM	Olive gray, fine silty sand, poorly graded, moist, medium
	25					<i>Dense, 33% passing #200 sieve</i>
						<i>End of Boring @ 25 feet Depth</i>
						<i>No Groundwater Encountered</i>
						<i>Boring Backfilled</i>



Undisturbed Ring Sample
Bulk Sample
Standard Penetration Test

City & County

**Soil Engineering
And Testing**

BORING LOG NO. B-5 (P-2)

Job # J&P2018037P1		08/12/18		Client: SRI SAI RAM MANDIR		
Hole Diameter: 8"		Elev. G.L.		Location:12594 ROSWELL AVE., CHINO, CA		
Sampling Method		Drive Wt. 140#		CME-45		Logged By: ZB
Drop: 30"				Drilling Co: GEOMAT DRILLING, RIVERSIDE, CA		
Dry Density (pcf)	Depth (ft)	# of Blows (ft)	Moist. (%)	Sample Type	Soil Class	Earth Materials Description Top Soil: Dense grass-vegetation-12"
					SM	Dark gray, fine silty sand, grass, vegetation, roots s. moist
						very loose
	5	21		■ ●	SM	Brown, fine silty sand, poorly graded, v. moist,
						medium dense, 27% passing #200 sieve
91.6	10	14	16.8	■ ●	ML	Olive gray, fine sandy clayey silt, moist, stiff
101.0	15	21	16.0	■ ●	SM	Olive gray, fine silty sand, poorly graded, moist, medium
						dense
	20	9		◆	ML	Olive gray, fine sandy clayey silt, moist, stiff
	25	21		◆	SM	Olive gray, fine silty sand, poorly graded, moist, medium
						dense
	30	29		◆	SM	Olive gray, fine silty sand, poorly graded, moist, dense



Undisturbed Ring Sample
Bulk Sample
Standard Penetration Test

City & County

**Soil Engineering
And Testing**

[illegible]

City & County

Soil Engineering And Testing

BORING LOG NO. B-5 (continuous from 30')

Job # J&P2018037P1

08/12/18

Client: SRI SAI RAM MANDIR

Hole Diameter: 8"

Elev. G.L.

Location: 12594 ROSWELL AVE., CHINO, CA

Sampling Method

Drive Wt. 140#

CME-45

Logged By: ZB

Drop: 30"

Drilling Co: GEOMAT DRILLING, RIVERSIDE, CA

Dry
Density
(pcf)Depth
(ft)# of
Blows
(ft)Moist.
(%)Sample
TypeSoil
ClassEarth Materials Description
Top Soil: Dense grass-vegetation-12"

30

29



SM

Olive gray, fine silty sand, poorly graded, moist, dense

35

9



ML

Olive gray, fine sandy clayey silt, moist, stiff

53% passing #200 sieve

40

21



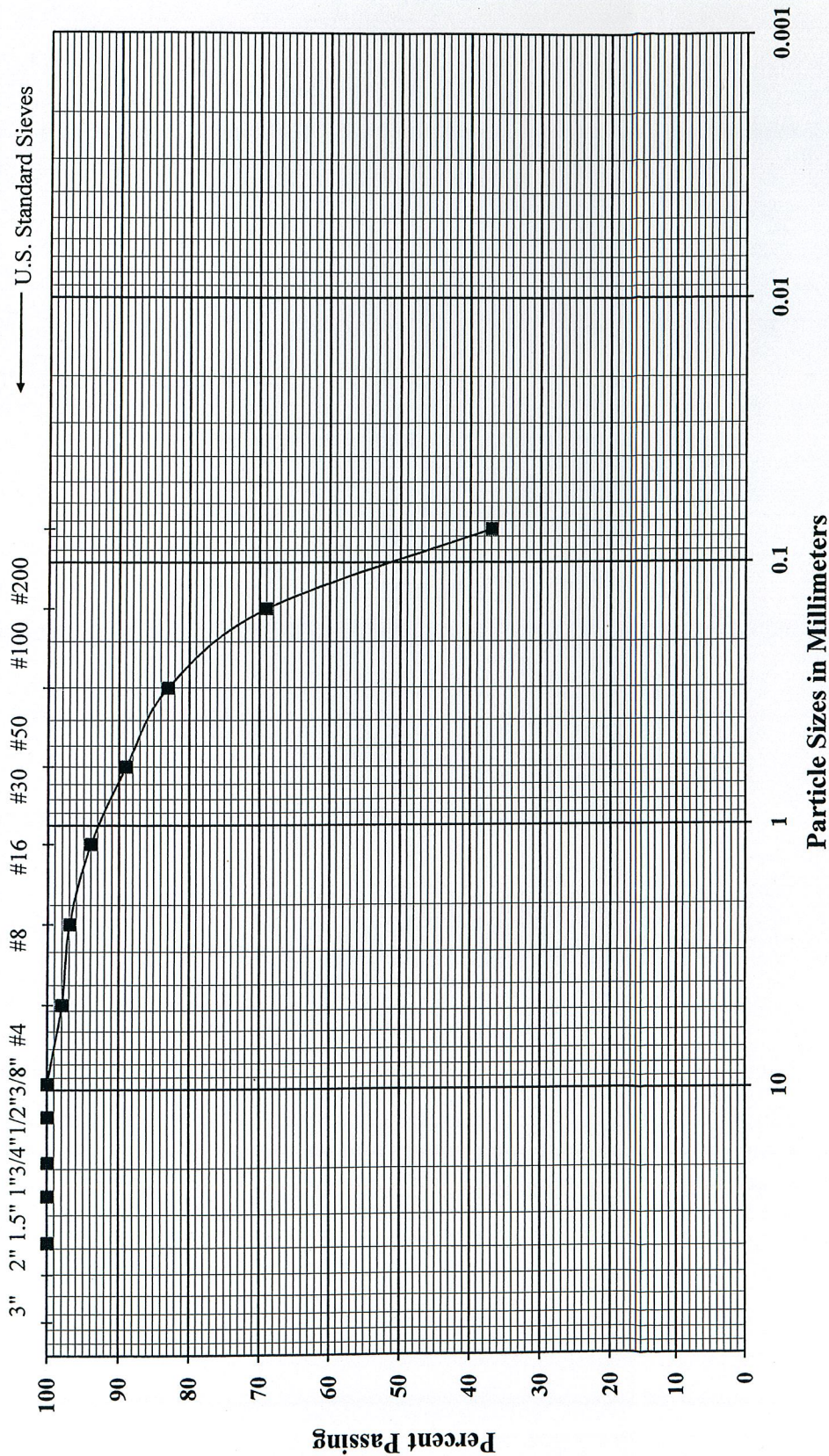
ML

Olive gray, fine sandy clayey silt, moist, stiff

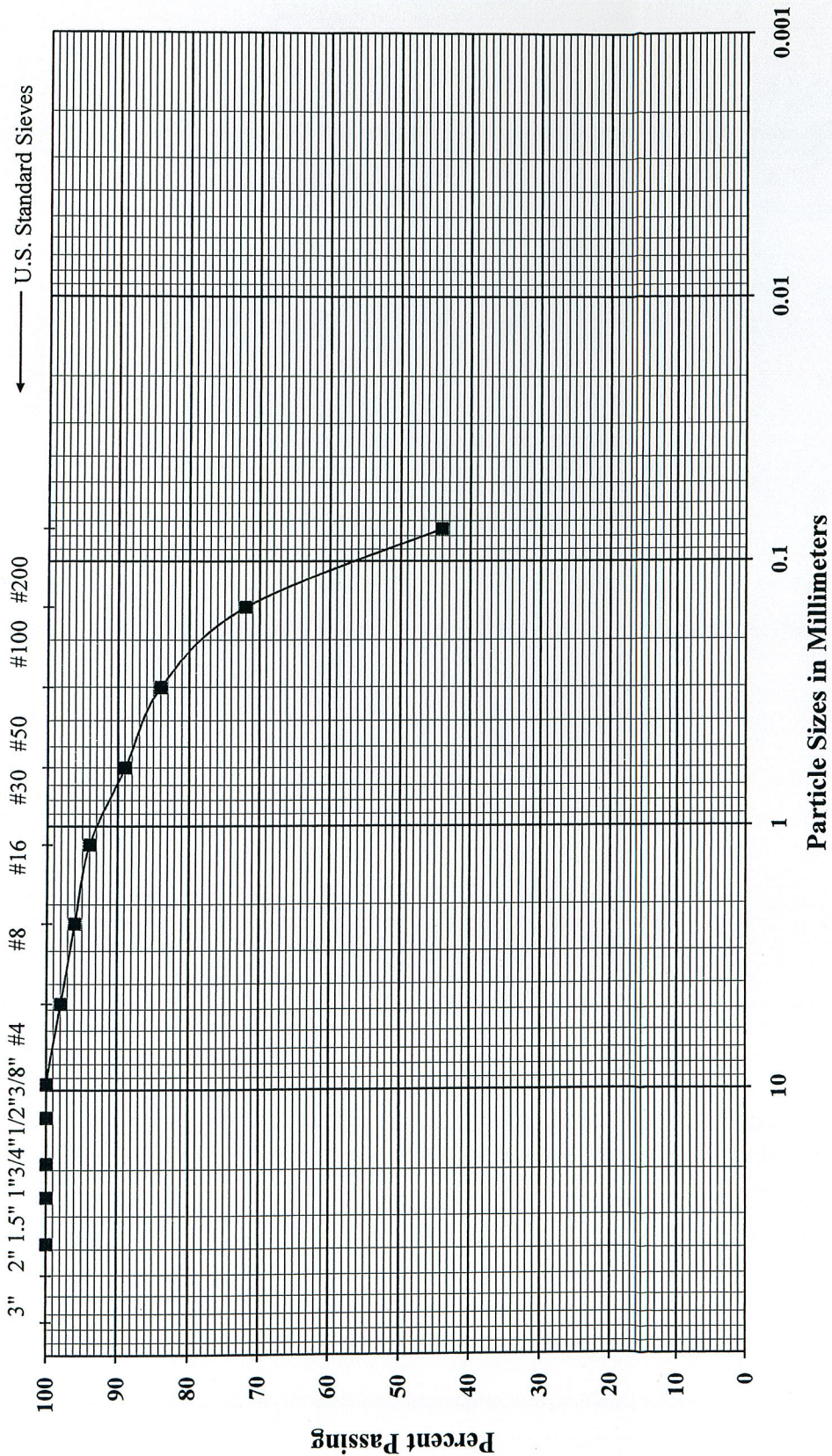
58% passing #200 sieve

*End of Boring @ 40 feet Depth**No Groundwater Encountered**Boring Backfilled after Percolation Testing*Undisturbed Ring Sample
Bulk Sample
Standard Penetration Test**City & County****Soil Engineering
And Testing**

GRAVEL		SAND			SILT & CLAY	
COARSE	FINE	COARSE	MEDIUM	FINE		



GRAVEL		SAND			SILT & CLAY	
COARSE	FINE	COARSE	MEDIUM	FINE		



Sample Identification: T-2 @ -8'
 Location: 12954 ROISWELL AVE., CHINO, CA
 Soil Type: Olive gray, fine silty sand (SM)
 5.20%

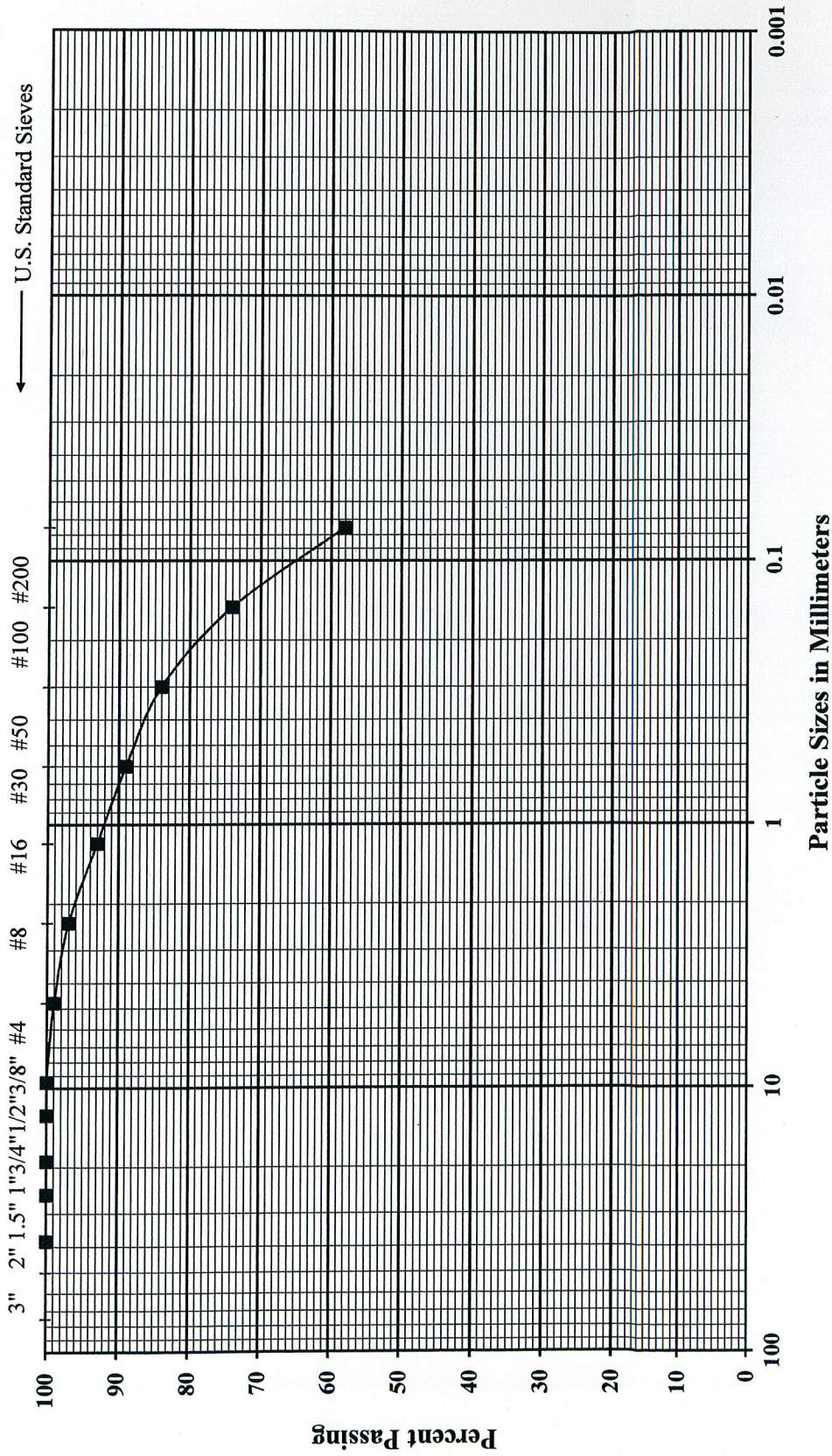
City & County
 Soil Engineering
 And Testing

GRAIN SIZE DISTRIBUTION CURVE

PROJECT No.
 J&P2018037P1

SRI SAI RAM MANDIR

GRAVEL		SAND			SILT & CLAY	
COARSE	FINE	COARSE	MEDIUM	FINE		



Sample Identification: B-1 (P-1) @ -38'
Location: 12954 ROISWELL AVE., CHINO, CA

Soil Type: Brown, fine sandy clayey silt (ML)
20.00%

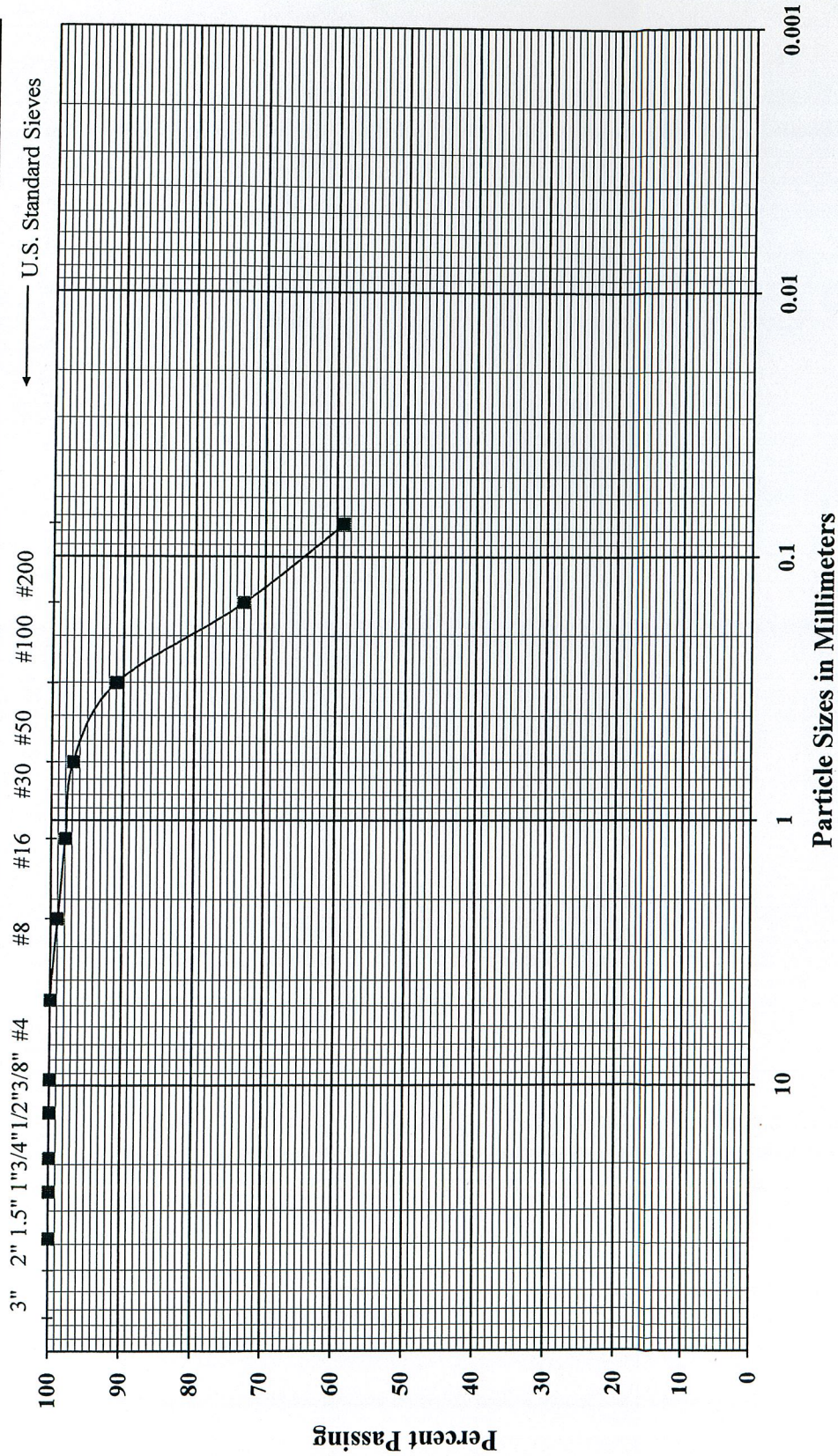
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GRAIN SIZE DISTRIBUTION CURVE

SRI SAI RAM MANDIR

PROJECT No.
J&P2018037P1

GRAVEL		SAND			SILT & CLAY	
COARSE	FINE	COARSE	MEDIUM	FINE		



Sample Identification: B-4 @ -14'
 Location: 12954 ROISWELL AVE., CHINO, CA
 Soil Type: Olive gray, fine sandy silt (ML)
 17.80%

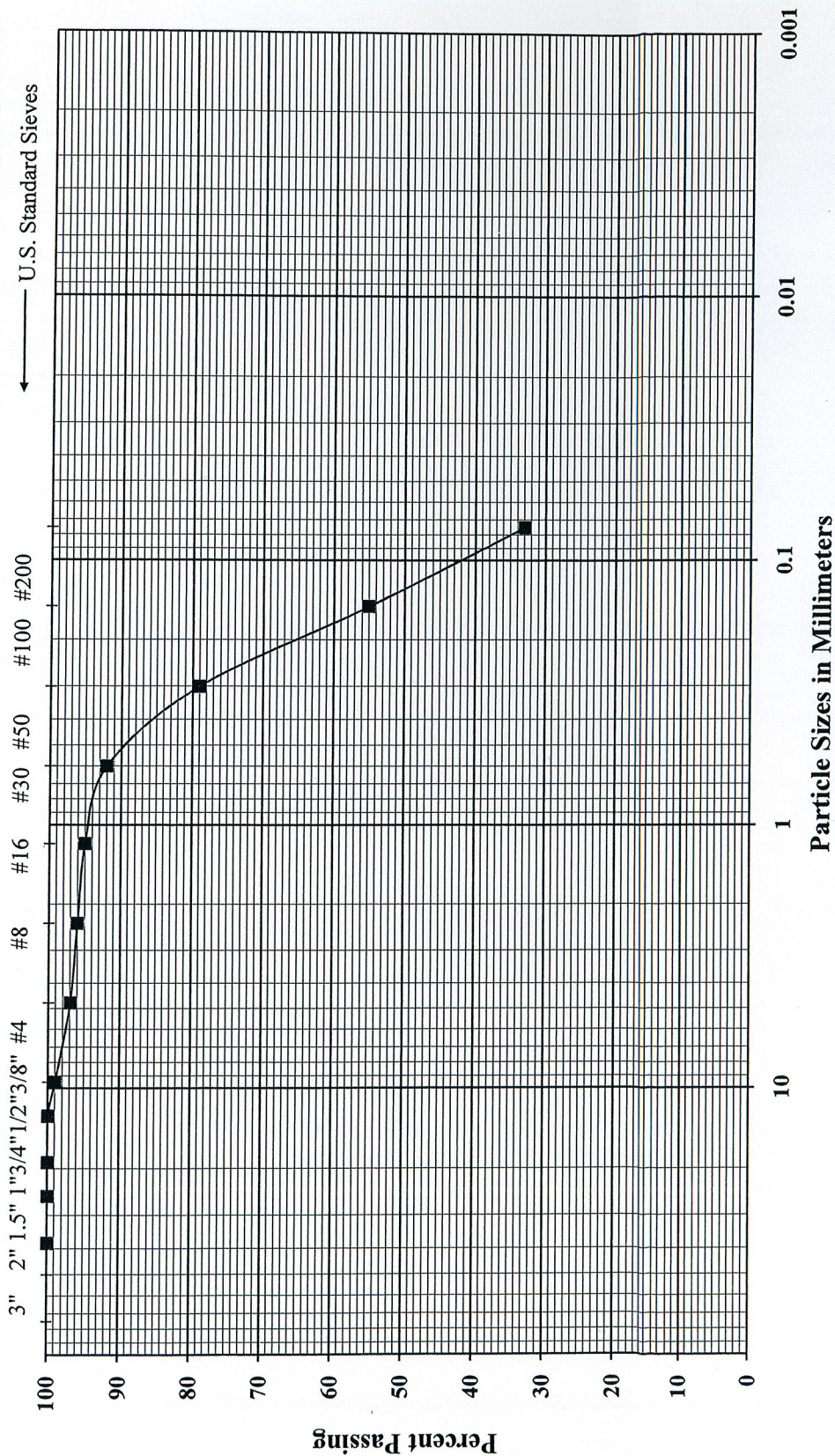
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GRAIN SIZE DISTRIBUTION CURVE

SRI SAI RAM MANDIR

PROJECT No.
 J&P2018037P1

GRAVEL		SAND			SILT & CLAY	
COARSE	FINE	COARSE	MEDIUM	FINE		



Sample Identification: B-4 @ -24'
 Location: 12954 ROISWELL AVE., CHINO, CA
 Soil Type: Olive gray, fine silty sand (SM)
 7.30%

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 And Testing

GRAIN SIZE DISTRIBUTION CURVE

SRI SAI RAM MANDIR

PROJECT No.
 J&P2018037P1